# TECHNICAL DATA SHEET

# HYDROGEN PEROXIDE 35%

## PRODUCT DETAILS

| Particular | Details |
|---|---|
| Name of the Product | Hydrogen Peroxide – 35% w/w |
| Grade | Technical Grade |
| Formula | $H_2O_2$ |
| CAS Number | 7722-84-1 |
| Appearance | Clear, colorless liquid free from suspended impurities and dust particles. |
| Odor | Odorless |
| Identification Test | Shake 1 mL of sample with 10 mL of water containing 1 drop of 2 N sulfuric acid, and add 2 mL of ether. The subsequent addition of a drop of potassium dichromate TS produces an evanescent blue color in the water layer that upon agitation and standing passes into the ether layer. |
| Boiling Point @ 760 mm Hg, °C | 108 |
| Freezing Point °C | (-) 32 |
| Active Oxygen (%) | 16.4 |
| Shelf Life / Re-test Date | 12 months, under recommended storage conditions. |

## TEST SPECIFICATION

| # | Parameters | Units | IS 2080 : 2021 | Specification | Method of Analysis |
|---|---|---|---|---|---|
| 1 | Strength of $H_2O_2$ | % w/w | Min. 35.0 | Between 35.0 to 35.80 | By $KMnO_4$ Titration |
| 2 | Stability as $O_2$ emitted /25 ml sample at 100°C | ml/ minute | Max. 0.3 | < 0.30 | By Gasometric |
| 3 | Acidity (as $H_2SO_4$) | gr/100ml | 0.015 - 0.03 | < 0.03 | By NaOH Titration |
| 4 | Residue on evaporation at 105°C | gr/100ml | Max. 0.15 | < 0.15 | By Evaporation |
| 5 | Residue on ignition | gr/100ml | Max. 0.05 | < 0.05 | By Ignition |
| 6 | Iron (as Fe) | ppm | Max. 1.0 | < 0.5 | By Colorimetric |
| 7 | Copper (as Cu) | ppm | Max. 0.1 | < 0.1 | By Colorimetric |
| 8 | Lead (as Pb) | ppm | Max. 10.0 | < 2.0 | By Colorimetric |
| 9 | Arsenic (as $As_2O_3$) | ppm | Max. 2.0 | < 0.5 | By Modified Gutzeit Method |
| 10 | Apparent pH | -- | -- | Between 1.5 to 3.5 | By pH Meter |
| 11 | Specific Gravity @ 20°C | gm/cc | -- | Between 1.132 to 1.135 | By Hydrometer |

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